

# AMATEUR RADIO

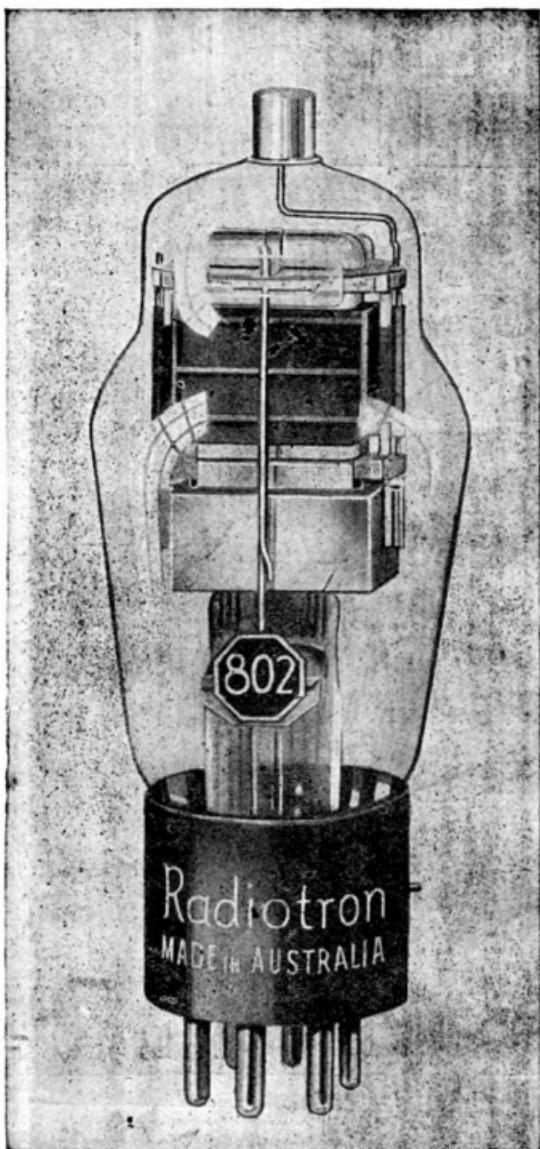


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# AMATEUR RADIO

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Vol. 7 No. 7

1st JULY, 1939.

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= = = **EDITORIAL**

The Australian amateur experimenter has a great deal to be thankful for to those officers of the Postmaster-General's Department who are responsible for the interpretation and administration of the Wireless Telegraphy Regulations. The Wireless Institute of Australia can truthfully say that we as a body have received from the Chief Inspector, Mr. J. Malone, and his associates every encouragement and consideration in matters relating to amateur radio in Australia. Every experimental licensee, whether a member of the W.I.A. or not will be pleased to hear that Mr. J. Malone, has accepted a transfer to the Queensland Postal Services where he will occupy the position of Deputy Director of Posts and Telegraphs. An advancement of this type generally means a considerable increase in responsibility and we do not hesitate to say that the State of Queensland could not have selected a better administrator anywhere.

Mr. Malone has served with the Postal Department for approximately forty years and has been for nineteen years in charge of the Wireless Branch. During this time the branch has developed under his guidance until its activities which in that time have multiplied a hundredfold has developed on very sound lines, due to his organising ability. It would only be truthful to say that our pleasure at his advancement is tinged with regret at the loss in an administrative capacity to the amateur fraternity of a very real friend.

Many and varied stories might be told of the clemency extended to amateur experimenters by Mr. Malone and we sincerely hope that his successor will continue on similar lines in the future.

We wish him every success in his new sphere of activities and take pleasure in thanking him publicly extended on countless occasions.

—The Editorial Committee.

## Adding an "R" Meter to a Super

---

(By VK3WU)

A generally admired feature of some of the modern communication receivers is the "R" meter. Many Amateurs think highly of this attachment little realizing that an ordinary milliammeter can, in almost every case, be connected into almost any super het providing that the receiver includes an A.V.C. system. Whether it is known as a "Signal Strength Meter," "Tuning Meter" or an "R Meter," such a device is an extremely useful one to have, not only to hams, but to S.W.L.'s and DXers.

As an "R" Meter it permits giving "R" reports on received stations on a much more definite basis than in the case where such reports are dependent on the receiver alone—a fact well enough recognised to render further comment unnecessary. Some of the other advantages which are less widely recognised are perhaps even more important.

It likewise constitutes a check on the proper operation of a receiver.

The meter may be connected in one or more of the IF stages which are controlled by the A.V.C. system. The simplest is to connect it in only one IF stage and a meter with a range of 0.1 Ma. is employed with a shunt rheostat directly across the meter as shown in Diagram 1. The meter used need not have such a low range, but in any event the range should be less than the current of the tube circuit in which it is connected.

The rheostat has the effect of reducing the meter sensitivity and is adjusted until the meter shows full scale of deflection with no signal tuned in. It is desirable that the whole scale of the meter be used because the signals readings will be larger than would be the case if only part scale deflection was obtained with no signal tuned in.

Figure 1 shows also method of connecting the meter and its shunt in the plate supply lead of 1 or more IF stages. It is also possible

to connect such a meter in the cathode circuit instead of the plate circuit, but this has the disadvantage that both screen and plate current will flow through the meter. On the other hand it has the advantage that one side of the meter will be at ground potential. Which of these two methods of connection to use can be determined by individual instance by experiment.

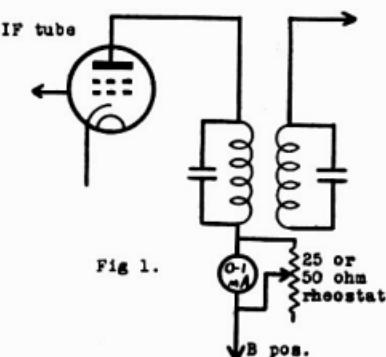


Fig 1.

A meter with a scale marked off in 50 divisions and equipped with a knife edged pointer is an excellent one for the job as extremely accurate readings can be obtained.

The value of the shunt rheostat depends upon the sensitivity of the meter used and also on the internal resistance, and a 25 or 50 ohm rheostat will be found satisfactory in most cases.

In addition to giving "R" reports, there are other ways in which the "R" meter serves to make better reports possible. For instance, it gives a definite check on the modulation of received signals. If a signal is modulated 100 per cent. or less, there will be no fluctuation of the needle after the signal is tuned in, whereas modulation over 100 per cent. will result in "wobulation" of the meter. The meter will show the carrier level of any signals and will

rise and fall as the signal fades in and out, but will not be affected by modulation unless over-modulation is taking place. The only exception is when the meter is incorporated in a receiver which, due to overloading or poor design, detector action takes place in the amplifier stages.

The "R" meter is a perfect indicator when making adjustments to the receiver or aligning the RF or IF stages. In effect, it indicates the level of the signal at the input to the second detector and, therefore, will show immediately any change which results in greater amplification. It will likewise provide a continuous check on all stages ahead of the 2nd detector. Another useful application is when testing the effectiveness of different receiving antennas. When depending on the receiver alone a 25 or 30 per cent. improvement in the antenna would often times not even be noticeable, whereas even slight improvements are noticeable on a meter.

Figure 2 shows meter and shunt rheostat in plate circuit of final IF stage. Points 2 to 7 show other positions where it may also be connected providing all IF tubes are subject to A.V.C. Points 7 and 8 are positions for a meter of 10 Ma.; in all other places a small range meter should be used because the range must be less than the current drawn by the tube. Positions 4, 5, 6 the meter is at ground potential, but in all other positions is it at High DC potential and the leads should, therefore, be well insulated to prevent accidental contact.

## NOTICE.

### Class Manager and Instructors, Victorian Division.

Applications addressed to the secretary before 10th July, Box 2611W, G.P.O., for the positions of class manager, morse instructor and theory instructor will receive the attention of council at the earliest possible moment. These positions carry suitable honorariums. Apply promptly.

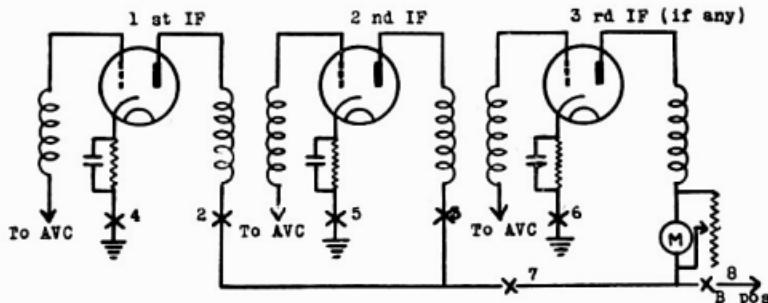


Fig 2.

## BASSETT CABLES.—IMPORTANT ANNOUNCEMENT.

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28 "	1000	" ..	2	9	0	
13 "	1000	" ..	1	16	0	

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# The Countryman's Transmitter

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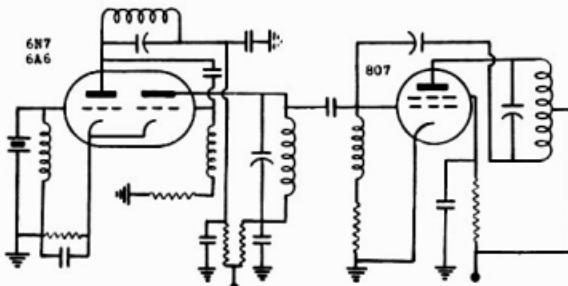
(By N. M. Templeton, VK3HG.)

As the title implies, the transmitter to be described is most suitable for the ham located in the country where the AC mains are not available, and he is forced to use genemotor or vibrator power supply. This circuit has superceded the 6L6-807 rig here at 3HG, and has proved itself to work equally well on all bands from 80 to 10 with one crystal. The crystal current is less than half that of the 6L6 circuit, and the total plate current of both sections of the 6N7 is less than that of the plate and screen of the 6L6.

The first section of the 6N7 is used as a straight crystal oscillator, while the second half is either a

as a straight amplifier without the aid of a buffer stage. A 6L6G could be substituted where the plate voltage does not exceed 400. The 807 here is neutralised, but a shield between input and output circuits would be just as effective. The neutralising condenser must be exceedingly small, otherwise neutralisation cannot be obtained. A three plate midget with both fixed plates removed is used here, one support for the fixed plates being solely used as the fixed plate. Even then the condenser is wide open.

In order to keep the plate current in the final as low as possible, attention must be paid to details such



buffer, doubler or quadrupler. The output when quadrupling is sufficient to drive the 807 fully, and by again doubling in the 807, with reduced input, quite good output is obtained on ten metres, although the efficiency is not so good as on the lower frequencies. The circuit is straight forward and simple, and no snags need be expected, providing care is taken in construction. The glass type of tube is supposed to give better results than the metal 6N7, but the latter is the only type tried here as yet.

The 807 is probably the best tube for the final, as it is so easily excited. It can be operated on three bands

as short grid leads, adequate insulation in tank circuits, and low C in the final tuning condenser. With plate voltages of 250 and 550, the total current drain is 130 mills. Thus it will be seen that this tube combination is very light on current and suited to the genemotor or vibrator power supply. The heater consumption is only 1.7 amps from a six volt accumulator. Modulation is obtained here with a single 6L6G, single choke Heising, modulating both the screen and plate of the 807 and both depth and quality are quite good, with an input to the 807 of 50 watts.

## Federal and Victorian QSL Bureau

R. E. Jones, VK3RJ, Qsl. Manager.



Edgar Sebire, winner of the listening sections of many recent VK DX contests, has just acquired a valuable impetus to small hour listening. Congratulations, OM, and we trust her yells do not drown the R3 DX.

From all the responses to last month's note, it appears that J8CD does QSL. VK3CX was the enquirer.

Pleased to note Herman Asmus, VK7ET, ex-VK3ET, doing the Block in Melbourne recently. Herman, who is on holiday, looked brand new.

VK3NI, recently returned from a trip to VK6, is enthusiastic over that State, and the fine treatment accorded him there.

3NO, located in Wangaratta, advises that stations in Albury, Shepparton, Benalla and Wangaratta will be on 56 mc. and keen to contact all comers.

QRA and any dope on LZ1AK would be appreciated by this Bureau.

Another who enjoyed his recent visit to Melbourne and Geelong is

Dick Giddings, VK3DG, of Stratford. Dick rushed home in time for the Eastern Zone Convention.

Apropos the Eastern Zone Convention, many of the gang journeyed on to Omeo, and ornamented Bill, 3WE's shack. Heard them all at his mike (except mike shy 3PG). What created the bad surging, Bill?

The QRA of the new QSL Manager for W9 is—W9DMA, 238 East Main street, Caledonia, Minn., U.S.A.

Cards for the undermentioned VK3 stations are on hand.—AP, AT, BD, BF, BG, BK, BN, CA, CO, CQ, DI, DU, EI, EF, EL, EW, FT, FU, FW, FY, FZ, GD, GN, GP, GX, HE, HI, HP, HV, IA, IB, ID, IF, IN, IP, IR, IT, IV, IY, JD, JE, JH, JP, JM, JZ, KK, KI, KO, KP, KT, KY, LI, LL, LP, MJ, NB, NF, NG, NT, NX, OI, OP, OU, PF, PH, PJ, PL, PV, QR, QT, RD, RL, RF, RV, SB, SC, SO, ST, TA, TC, TF, TP, TY, TZ, UQ, UX, VA, VB, VC, VD, VY, VZ, WB, WH, WC, XC, XG, XL, XU, XV, YG, YH, YS, ZB, ZD, ZS.

Cards for the following have "but little time to stay":—3BL, FS, GE, GJ, GU, HB, JL, JN, JS, KL, KM, LD, LM, LX, NF, PN, QA, QO, RA, TU, UF, VN, XE, YM, YZ, YF, ZF.

On the staff of the Monterey, visiting Melbourne in June was W6LJC, A. Wilson, of Oakland, Calif.

VK7LZ reports: "I see the Federal QSL Bureau wants to know of any amateur receiving a QSL from J8CD. Well, quite a few of use have QSO'd him here, and received cards, together with photos. His address is: Dr. Ryozo Nagataki, 2 Yamatomachi, Pyengyang, Korea."

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## Contest Notes

(R. E. Jones, VK3RJ, Contest Manager.)

### VK-ZL 160 METRE C.W. CONTEST

Attention is directed to the rules and conditions of this contest, which will be held on September 2, 1939. See "Amateur Radio," June issue.

### VK ALL-BAND C.W. CONTEST.

Rules and conditions governing this contest will appear in the August issue. The contest will be held during the end of September.

### VK-ZL 80 MX PHONE CONTEST, 1939.

The following are the rules:—

1. All entrants to win prizes must be financial members of the W.I.A. if residing in Australia and of the N.Z.A.R.T. if residing in New Zealand. Any station operated by non-members may enter the contest, but will not be eligible for awards or prizes.

2. The contest shall be by means of amateur radio telephony transmissions on the 80 metre band only.

4. There shall be three sections of the contest, namely:—(1) Transmitting, unlimited hours. (2) Transmitting, limited hours. (3) Receiving.

4. The contest will commence at midnight Saturday, 15th July (New Zealand Standard Time), and finish at midnight Sunday, 30th July, 1939 (New Zealand Standard Time).

5. Seven days' operation only will be allowed, the days of operation not necessarily to be on consecutive days. To come on the air calling for the contest or to send a letter combination as provided in Rule 6 is sufficient in either case to establish for that day.

#### Transmitting Section, Unlimited Hours.

6. During the course of each two way contact, each station will exchange QSA, R, reports and exchange a six letter combination. Every log submitted shall contain the following details concerning each QSO:—(a) Time and date; (b) correct call sign

of station worked; (c) QSA, R, reports given and received; (d) six letter combination given and received; (e) points claimed; (f) at end of log total points claimed. The six letter combination shall be arrived at as follows:—

Every station shall select three letters of the alphabet whose combination shall not be in alphabetical order or form a three letter word such as YOU, CAT, etc., and these three letters will form the latter half of every combination sent out by the station. The first three letters will be taken from the last three letters of the immediately preceding QSO.

Example: At the beginning of the contest ZL1ZZ selects the letters AZK and VK3AA the letters QMI. They contact, both for their first contact; ZL1ZZ sends his three letters only, not having worked a station before, and VK3AA does the same. On ZL1ZZ's second QSO his letters will become QMIAZK, and VK3AA's will be AZKQMI.

7. No time limit to be imposed on any QSO.

8. No schedules permitted.

9. No station to be worked more than once.

10. Only one operator permitted per station.

11. All transmissions to be in accordance with the Radio Regulations.

12. Points for each QSO will be claimed as detailed in the following table, which is based on the Great Circle distances to the nearest 500 miles:—

15	35	20	15	15	15	5	ZL	1 and 2.
15	35	20	15	15	15	ZL	3 and 4.	
5	20	5	5	5	5	VK2.		
5	15	5	5	5	VK3.			
10	20	10	VK4.					
5	15	VK5.						
20	VK6.							
	VK7.							

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### Limited Hours.

13. Competitors desiring to enter for this section will be governed by all the preceding rules, but must not commence operations in the contest before 11.15 p.m. (New Zealand Standard Time) if residing in New Zealand, and if residing in Australia, before 11.15 p.m. local standard time of the State in which the competitor is located, on any date. Operation is to cease at 7.15 a.m. on the following morning, 7.15 a.m. being N.Z. or local standard time as the case may be. Stations contacted need not necessarily be in the limited section of the contest. For the purpose of this section only a day's operation as specified in Rule 5 will be computed as being between the hours limiting operation.

14. In submitting their entries for this section in accordance with the detail required in Rule 6, entrants shall state on the top of the log sheets the section entered for.

### Receiving Section.

15. Rules 1 to 12 inclusive of the preceding rules shall apply to the receiving section substitution as applicable "listening" and "heard" for the words "calling," "worked" and contacting."

16. A log submitted for this section shall be in the same form as required by Rule 6 with the addition of details as to what licensing district the entrant is residing in. Points shall be claimed as set out in Rule 12.

### Awards.

17. A trophy will be awarded to the winner of each section (ZL and VK combined). In addition prizes will be awarded to the winning two stations in New Zealand by the N.Z.A.R.T. and the W.I.A. will award two prizes in Australia.

18. Logs from Australian entrants shall be forwarded to the W.I.A., Box 2611W, Melbourne, and must reach there not later than 26th August, 1939. Logs from New Zealand entrants shall be forwarded to the N.Z.A.R.T., Box 489, Wellington, N.Z., and reach there not later than 31st August, 1939.

19. To each log shall be attached a declaration that the entrant is a financial member of his national society (if such is the case) that he is the only one to operate the station, that he only operated his station for seven days for the purpose of the test.

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VK3UH-----

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Plug-in Dust Proof Holders, 7/6 each.		

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Phone: U1218.

## 28 and 56 M.C. Notes

---

(By A. Pritchard, VK3CP.)

Conditions have now settled down, and excellent sigs. from our old friends in the States are being received. The South Africans, ZE1JR, ZS5T, ZS5DD have also shown up between 5 and 7 p.m. on Sundays. The K6 stations have a very active gang, and make excellent round table qso's, with as many as half a dozen a time. The following are the fellows usually contacted: K6QJE, K6PTW, NPO, PIT, PCF, MVV, OQM, PLZ, NKF, QXU, DV and K6MVX, whose half wave ant for tx is in his second story room. K6PUL portable KF on Baker Island is using 8 watts to his final 210 driven by a 6A6, 6L6 modulator and 130ft. cf steel guy wire for the antenna. This outfit gives us R7 signals. The usual 2 p.m. fade-out for the States has now increased to 5 p.m., and easy contacts are made up till 4 p.m. 3XP qso'd W5FUS at 4 p.m., and W7ACD was contacted here at 3CP and also at 3BQ at 5 p.m., 7th June. With 7ACD's sig. from his Vee beam, having 6 waves on each leg, the signal was hitting R9 on peaks, although the three sigs. had quite terrific high speed fading, making the R meters appear to have the jitters! These R meters are fascinating to watch on powerful qso signals. VK3DG, of Stratford, paid us a visit a few weeks back; his 20 mx Vee beam has 364ft. 10in. in each leg, yes, to the half inch, hi! So we can look forward to Dick's arrival on 10. VK3DA, of Elwood, has his rig on 10 and 5, and has R8 sigs. here on either band. Geoff has a 35T running in the final and mod. by Class B, 809's, 10 tube super with 1500 kc. IF's. I received a letter from 3YT. (Many thanks, Allan.) The rig on 56096 kc. has a 6L6G co, 6L6, 6L6, 807 with 50 watts to the final on cw. Transmissions commence at 10 a.m. each Sunday morning with test calls. A super is under construction so the 5 metre gang should turn their beams on Ballarat for a good chance of contact. 3BW,

who is often heard being called. 3XP qso'd W3GQL, who had 6 watts of Portarlington, tells me he is getting plenty of output on 5 metres, too, and a converter using 1851 and 6KSG for both 10 and 5 metres has improved the receiver position. The greatest interest so far with a new development is still centreing around the now famous close spaced beam, 3 elements or more. Burn, of VK3IW, is going to build one at last, too. 3CZ has built a nice looking 4 el. array, and BQ-CP all helped to tune it up with the aid of Max's 115 mill. 100 div. thermo-galvanometer in the centre of a temporary  $\frac{1}{2}$  wave wire 30ft. from the antenna property. The readings were 4 div. with the ant. alone, 12 div. with the addition of the refl., 24 div. with the 1st dir. added, 50 div. with the 2nd dir. in place, showing the tremendous gain obtained. With the beam left in place on a 4ft. step ladder, and pointed on the States (through rotary clothes lines, trees and tennis court wires) R9 plus was received from W4FLS. The beam is now in place on its 35ft. pole. 3BQ has also added another director on his beam, and so far shows a front reading of 80 div. to 2 div. off the back. 3YP lost his H type beam (it fell down when being excited after a year's rest, hi!) and he is now building a 4 element job with steel conduit, which will be rotated from inside the room. VK5FM has his beam on top of the chimney with the rotating mechanism down same (a bit tough on frosty nights!)

ZD is building a trellis mast, also a close spaced beam. W2FU puts over good signals from a 5 el. beam, i.e. vert. J fixed on the pole with a ref. and 3 dir. rotating around it, no feeder troubles with that job! W6NKF has the most powerful phone at present, and uses an H type beam with reflectors, 8  $\frac{1}{2}$  waves in all and motor rotated. VK7 has an active 10 mx ham in VK7BQ, input to a UHX10 portable—4  $\frac{1}{2}$

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waves, H type beam ant. On May 6th at 1 a.m. VK3YH, using a 45 doubler final, contacted VE4ARA on cw, det. 1 audio for the rx and 40 mx Zepp ant., showing those old fluke conditions once more. No contacts with other VK States have been made—dueto skip, so please post the dope along, chaps.

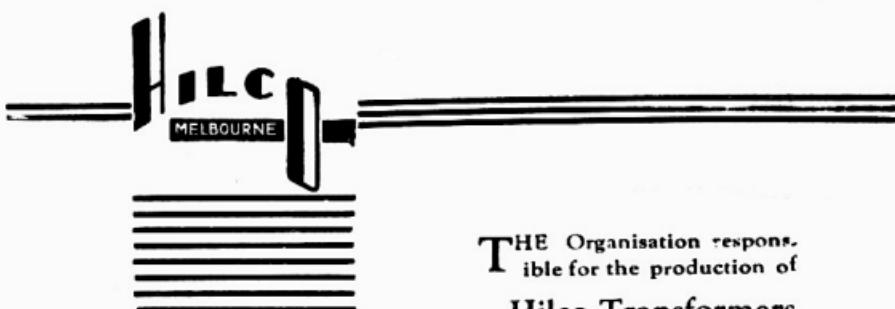
### DX Notes

(By VK3MR)

Conditions are keeping true to form again this winter, making the working of DX a hardship, and all the gang can be heard firing up their rigs on 80 in readiness for a good local ragchew as well as for the forthcoming all band contest. The falling off in conditions is reflected in the few reports received this month, both from fone and cw men, although the Europeans can be worked reasonably well from 3 p.m. to 6 p.m. most days. Despite the terrible qrm on the other side of the world, we still seem to have good contacts. A very unique contact was

effected between VK3BM and G6IA, who is the only ham on the Isle of Man, and it is the first fone contact with VK and the second contact since 1923. The first contact was on cw about 1923. He will be on every morning at 0630 BST on fone and cw, using 14085 kc., and is very anxious to contact Australian and New Zealand hams. This counts as a new country, so is worth sitting on. Those looking for a K7 contact are advised to look carefully through the fone band, as there are several helping to swell the qrm in that region. K7HGM is out for DX, his freq. about 14170 kc. K7ALC also operates at the low end. VK3BM has now increased his list of countries to 67, all on fone except 5. Bruce has increased the efficiency of his feeders, and is getting the benefit. He will be a little quieter now, as he has burnt out his alternator. We notice that old VK2XU is now signing G2OY. VK3QZ is about to make a hole in the bands overseas, using an 807 feeding into a full 7 mc. zcpp, which is 75ft. high both

(Continued on page 27.)



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Model 695 (on left).—Power Level Meter, Voltmeter, Output Meter. A rectifier type voltmeter, which gives readings in decibels as well as volts. Ideal for all types of audio equipment.

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Model 571 (on right).—Output-Meter. This has a constant resistance of 4000 ohms on each range, and is usually used as a terminating device on sound line or receiver output circuits.

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# Break-In

(By G. Glover, VK3AG.)

Every ham interested in fence BK operation has found that, unless special antenna networks are used, it is necessary to completely separate receiver and transmitter.

To the ham who has facilities and patience to erect both rigs together, we "Dips Our Lid." To the less fortunate this article is dedicated.

Figure 1 depicts system using two B.P. 0/3000 relays, and a third wire or earth return control circuit. The relays, battery and control switchs are arranged in the middle of the audio circuit by using line transformers with equally divided windings.

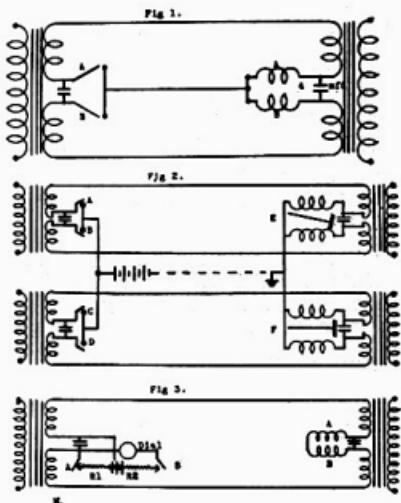
Figure 2 depicts a five wire (or four wire and earth return) super-control circuit. Two audio channels are provided in this case. One for input to modulator and the other for output of modulation over over-modulation indicator.

The actual physical circuit is self-explanatory; however, in this case Type 99 twin winding relays are so arranged that Button A leaves Relay E in position to apply filament current, Button B reversing relay to cut off current. Buttons C and D perform similar functions for plate voltage via relay F. The most important difference between this system and the former is the fact that D.C. only flows while buttons are pressed, thus where interlocked pilot lamps may be used to indicate condition in former circuit, duplicate relays at operating position would be necessary to operate pilot lamps in latter system.

Naturally the former system may be used in conjunction with two audio circuits, and thus provide four control circuits; however, in order to neutralize excitation effect of D.C., both relays on circuit must be excited when circuit is in operation.

Figure 3 will interest the more ambitious ham. It is a circuit devised by the writer to operate over P.M.G. lines between B.C. station and studio of 3YB.

Rotary steppers and relays in conjunction with Dialing system provides an endless number of control circuits. This circuit differs from both the earlier circuits, in that it employs polarized relays (long pole 2,000 ohm) and does not require a third wire or earth return. The



arrangement of the entire circuit is worthy of special note. The two polarized relays are connected in series for a specific purpose. If connected in parallel the back E.M.F. of one relay operates the others, but when in series acts as a quench.

The resistors R1 and R2, each of 1000 ohms are connected in battery circuit to guard against short circuits or to limit current in the event of both circuits being operated simultaneously—under these conditions cancellation of voltage would result in non-operation of either relay.

Dial contacts are normally closed, hence Button B is placed in series with dial to cut-off current when not required.

It serves a dual purpose, that of mitigating against the operation of unit by unauthorized persons being

really its most important function. Although the average person derives pleasure from spinning dial, the idea of pressing a button at the same time does not necessarily occur to them.

Button A operates required relays or circuits after preselection by dialling circuit, and where operation is required to stay put until cancelled, Type 99 relays are employed. A 45 volt light duty "B" battery centre-tapped is ideal for this purpose, and as the current is less than five milliamperes, clicks registered in audio circuit are not detrimental if audio circuit is fed at high level.

In the case for which circuit was devised audio circuit is merely supervisory. The programme channel being entirely free of control elements, apart from programme switching actuated by supervisory circuit. An automatic homing devise restores the rotary steppers to normal when required.

There is no limit to the number of functions which a properly designed remote control system may be called upon to perform.

Any of the systems outlined can be adapted to the requirements of the individual case, and may be woven together according to the number of control functions required.

## Remote Control

(By D. Randall Ayre, VK3KP.)

Readers who happen to live in the city will no doubt have noticed the arrival of the Philco "Mystery Set." Perhaps some of you have visited the dealers handling this clever device, and seen for yourselves the somewhat strange phenomenon of a radio receiver controlled from a distance by a dial on a small box. The chief element of strangeness is, of course, the fact that there is no metallic connection between the control box and the master set. In short, the receiver is remotely controlled by radio.

The control box consists of a low-power transmitter operating in the

range 350 to 400 kc. The transmitter is battery powered and radiates by means of a frame aerial built into the box. Suitable provision for the reception and utilisation of the control signals is made in the main receiver, and altogether, the arrangement is one of the most novel and successful seen here for some time.

However, the incidence of this receiver gives rise to one or two rather disturbing possibilities.

These sets are manufactured in America, and are undoubtedly very fine pieces of design and craftsmanship. Hence, it follows that the control transmitters are very likely carefully arranged to eliminate any interference which might occur in the immediate vicinity of the installation. In addition, the frequency channel used by them is not likely to cause much trouble to anyone.

It is logical to suppose that Australian manufacturers will in due course commence the production of similar devices, since there is no earthly reason why, if the imported article is to be allowed, local firms should not have a share in the pie. Then will follow, more or less inevitably, a position which I venture to suggest may easily become chaotic unless rigidly controlled by somebody. So long as the making and servicing of remote controls of this type is confined to reputable manufacturers all will be well. But ill-equipped factories supplying the cut price trade will soon trail after the more responsible firms. As usual, their products will have most of the refinements sacrificed to cost, and it is all too likely that their control transmitters will be of poor design.

It is easy to see the dangers of this state of affairs, but the trouble is, that direction would probably be confined to occasional cases of interference.

The worst possibility lies in the fact that home constructors may by some mischance be legitimately entitled to build these control devices. It is quite certain that, if they do start making them, it will not be long before strange and annoy-

(Continued on cover 3.)

## Divisional Notes

To ensure insertion all copy must be in the hands of the Editor not later than the 18th of the month preceding publication.

### N.S.W. Division

Magazine Editor, J. H. Fraser,  
VK2AFJ.

#### MAY GENERAL MEETING.

At the general meeting held on Thursday, 18th May, Mr. D. B. Knock (VK2NO) was the speaker, and the title of his lecture was "Present Day Applications of U.H.F. Apparatus." Mr. F. Carruthers was in the chair.

Besides being the business of the general meeting, the lecture was also meant to serve as an introduction to the reorganising of the U.H.F. Section of the N.S.W. Division, and to stimulate interest in those portions of our bands. The lecture was illustrated by photographs, which were passed round to those present. Also on view were quite a few pieces of H.F. gear, including a very fine superhet for 5 and 10 metre coverage.

The meeting was well attended and Mr. J. Moyle entered into the discussion at the close and confirmed some statements made by Mr. Knock, as well as adding a few remarks, mainly about television pentodes, which proved very interesting.

VK2TR moved a vote of thanks to the lecturer, and expressed the opinion that the U.H.F. Section should have a flying start. The motion was carried with acclamation and the meeting closed at 10.30 p.m.

#### JUNE GENERAL MEETING.

The June general meeting was held on Thursday, 15th, at the

Y.M.C.A., Pitt street. Dr. R. Healey, D.Sc., F.Inst.P., director of Technical Research at the A.W. Valve Co. Ltd., was the lecturer. His subject was "The Ionosphere and its Relation to Radio Frequency Transmission." Owing to the illness of our chairman and president, Mr. H. Peterson, a vice-president, Mr. F. Carruthers, was in the chair.

In terms that all present could understand, Dr. Healey discussed the whys and wherefores of the Ionosphere. Some of the U.H.F. boys seemed a bit disappointed after the meeting because the probability of DX on these bands was stated to be very remote, at least at the moment, according to present day observations.

The lecturer spoke about the effects that sunspot cycles may have and do have on the propagation of radio waves, especially the short waves between 10 and 100 metres. It would appear that the best period for ten metres has passed for a time and that 20 metres is also on the wane, but that 40 metres may have some interesting possibilities in a year or so.

During the discussion, Messrs. Cooper, Corbin, Knock, W. Moore, Moyle, Lusby and Fraser spoke. Messrs. Lusby and Fraser moved a vote of thanks to Dr. Healey, which was carried very heartily by all those present. In replying, Dr. Healey stressed the importance of keeping records of all work done in the U.H.F. sphere, as well as noting all general weather data, because one never knew lest there may be some connection between the prevailing weather conditions and the best times for U.H.F. transmission. He suggested some form of quarterly bulletin or report on work done and

information gathered. The meeting closed at 10.15 p.m.

## ULTRA HIGH FREQUENCY SECTION. INAUGURAL MEETING.

First meeting of the newly formed U.H.F. Section of W.I.A., N.S.W. Division, was held at the Y.M.C.A., Pitt street, Sydney, on the evening of 1st June, 1939. At a recent council meeting of the Division, Mr. Don B. Knock, VK2NO, was asked to accept the presidency of the proposed U.H.F. section, and the chair was taken by him on this evening. Secretary C. Horne, VK2AIK, was assisted by W. McGowan, VK2MQ, who had been appointed to the assistant secretaryship of the section. Attendance numbered twenty-two, including licensed experimenters and listeners, comprising the following: W. M. Moore, VK2HZ, M. Meyers, VK2VN, M. Lusby, VK2WN, F. Carruthers, VK2PF, N. Gough, VK2NG, H. Ackling, VK2PX, R. Trebarne, VK2IQ, R. Flood, VK2BN, J. Davey, VK2YE, J. Fraser, VK2AFJ, E. Dickson, VK2AFM, A. Joscelyne, VK2AJO, S. Weston, VK2AJH. From Taree, N.S.W., came Messrs. B. Eagling, VK2AEY, E. Fallowfield, VK2AKI, and P. Potts. Sydney U.H.F. listeners were Messrs. R. Rutherford and C. Bambury. Others present were K. Woodhouse, F. Burke (Waverley Radio Club) and C. Wilson. The president opened the proceedings with appropriate remarks on the value and future status of ultra-high-frequency experiments along modern lines, with regard particularly to the 56 M.C. band. With the object of ensuring that Sydney area should have available consistent transmissions from a number of stations, volunteers were called for the commencement of a station roster to provide the definite presence nightly of at least one station on the air. Stations scheduled for duty for the following month are as follow:—

Mondays: VK2HZ, 56,000 k.c., C.W. only, from 8 to 9 p.m. Tuesdays: VK2VN, 56,080 k.c., C.W. only, from 8 to 9 p.m. Wednesdays, VK2NO, 56,040 k.c., 30 minutes phone and 30 minutes C.W., 8 to 9 p.m. Thursdays: VK2AJH, 58,320 k.c., phone and C.W., 8 to 9 p.m.

Fridays: VK2MQ, 56,240 k.c., C.W. only, 8 to 9 p.m. Saturdays: VK2IQ, 56,190 k.c., phone and C.W., 8 to 9 p.m. Sunday nights: Open for general contacts and discussions.

In the daytime on Saturdays and Sundays transmission will be on the air from several stations mainly between the hours of noon and 1 p.m. for the benefit of distant stations and overseas, for the reason that experience shows that conditions for possible long distance communication are most likely to be favourable around this period. An important benefit to the U.H.F. section is the presentation by Mr. Rutherford of an epidiascope for the projection of illustrations, diagrams, etc., to enhance lectures. Mr. Rutherford was appointed U.H.F. listener representative for the section. Vice-presidents appointed by nomination are Messrs. W. M. Morre, VK2HZ, and R. Trebarne, VK2IQ. It was decided that meeting nights will be the first Thursday in each month. A technical committee was appointed, consisting of Messrs. Lusby, VK2WN, R. Trebarne, VK2IQ, with the president as ex-officio member. Matters discussed during the evening were:—

That all stations after completing a telephony contact with other stations should sign off with the station call sign on C.W. This is considered essential as a possible means of identification at distant positions. Where identification may be rendered difficult on speech for various reasons, a C.W. carrier can often be heard at a low signal level, and if keyed would be readily identified. The need for comprehensive lectures was stressed and it is anticipated that no difficulty will be encountered in this respect, both in the securing of visiting lecturers of technical standing, and from the ranks of members. A chain of relay stations is one of the objectives of the section. This will provide more interest for outlying country 56 M.C. experimenters and will lay the foundations of what may eventually be a valuable and more or less secret channel of communication should the need arise. Activities will include mobile, portable, and field day tests. Aircraft co-operation was offered by Mr. P. Potts, of Taree, whose flying activities are done in the Newcastle,

## Amateur Radio

N.S.W., district. One important matter for future consideration is the possibility of a special marine test, involving the co-operation of VK and ZL experimenters provided that arrangements can be made to erect on board a trans-Tasman vessel 56 M.C. equipment with bi-directional radiating system. Such a test would be of great interest to Australian and New Zealand experimenters and world wide amateur radio circles in general.

Many active experimenters expressed their regret at not being able to attend this inaugural meeting, these including J. Cowan, VK2ZC, E. Treharne, VK2AFQ, A. Sutton, VK2EM, N. MacNaughton, VK2ZH, R. Hart, VK2HO, C. Bischoff, VK2LZ, and W. Peell, VK2WJ.

### **THE R.A.A.F. RESERVE W/T SECTION.**

The R.A.A.F. Reserve W/T Section has received the attention of a large number of members of this Division in both the city and country and although training has not yet commenced in earnest considerable preliminary work has been done and everyone interested seems to be endeavouring to brush up their operating ability. It is anticipated that everything will be in full swing within the next few weeks and all Reserve members are assured of some particularly interesting and absorbing work.

Flashes:—

2WK.—Sorry to hear that you have been sick padre. All the boys hope that you will soon be better again and able to get along to the meetings.

2HP.—Our president has also been ill, but is well on the way to recovery, and should be "R max" again soon. Believe you have gone away for a month's holiday, Harold? Half your luck—I mean the holiday and not being ill!

2AG.—The pirate using 2AG's call sign had better quit. Harold will be on the air before this is in print. The pirate can collect a few dozen cards from Harold, or perhaps they belong to three letter calls and the

guys left the last letter off. Perhaps there has not been a pirate at all, Harold!

2NG has good quality fone on 20. Do you still have that early morning surf, Neil?

2AKI made a flying trip to Sydney for the U.H.F. Section's inaugural meeting.

2AEY also came to Sydney for the same reason and brought with him the flying member of the trio, Peter Potts. Best of luck with your ticket Peter. These three boys came from Taree.

Ex-2TJ is now at Groote Eylandt Aeradio Station. How is DX Roger? Do you make another country for the DX Century Club? Let the boys know your new call sign Roger.

"Thus news i made."

### **STATION REPORT. (2VU Singleton, Geoff. Partridge.)**

Five metre xmitter, 6F6 7mc xtal osc., 6L6 quadrupler to 28mc, 807 doubling to 56 mc. Exact frequency 56080 k.c., power 45-50 watts, antenna 2 section vertical "W8JK" with zepp feeders. It is fifty feet high and rotatable through 360 degrees. Receiver is a "VK2NO" converter and an eight tube communications. Transmission times on 56 mc., Tues., Thurs., Sat., Sun., 1915 to 1930, Sun., 100 to 1015 and 1315 to 1330. Transmitting and receiving 1900 to 2030 Sat. and Sun. Receiving 1900 to 1915 Tues., Sat., Sun. Transmissions on slow C.W. and fone occasionally on Sunday night. Is on 7 mc on Sundays and will make skeds with the boys there for 56 mc.

### **KEEP THESE DATES FREE.**

20th July, General Meeting.

3rd August, U.H.F. Meeting.

17th August, General Meeting. Time, 8 p.m.; Place, Y.M.C.A., Pitt street.

### **COALFIELDS NOTES.**

(By 2KZ.)

The boys from this area had a pleasant day at Newcastle during their trip around the Amateur

## Amateur Radio

shacks in that area, the weather was perfect and everyone enjoyed themselves. The first port of call was at 2BZ. Dave has a nice set up in the rig and using a half wave radiator with a director, the antenna can be reversed in direction by pulling a cord attached to it. Next we came to 2YS—KB to most of us. At Allan's place you see the last word in modern radio, with rotary beam, a R.M.E. 69 rx and a 100T Eimac tube in the final. Will be active very soon now. Off again to Gordon's (2CI), where a good old ham shack is to be found, a half wave antenna, and a nice rack and panel rig in grey steel which looks swell. Is on the air quite regularly and is keen on using a .303 at times. The boys had dinner at the Majestic. After the lions had eaten they moved on to 2UF's shack. Frank loves 10 metre work and has ten countries to his credit using 808 final and reversible antenna. He is a good old sport at any time. Crossing the Stockton ferry we landed at Wal's (2AJF), who has a rotary beam and 6L6 final with 30 watts. Has worked sixty-eight countries in one year, but has a wonderful location with sea at the front door and the river at the back. Good job you don't sleep walk Wal. (How s Nevada Wal?—Ed.)

Leaving Stockton we arrived at 2ZC's shack to find 2HZ and 2VN with Jim. In the shack one saw real ham gear from A to Z. A very interested party listened to Jim explain his gear. Jim cut a record using the boys' remarks for its subject. When you work 2ZC ask him to play it to you; about twenty hams are recorded on that disc. Jim is using 800's in P.P. and an "W8JK" antenna.

Dragging the boys on their way we visited Don (2AES) where tea was served in good old style and thoroughly enjoyed. His rig uses a T20 final and an eight tube super, and plenty of elbow room in the shack. The last stop was at 2AFA's place. Harry has a 809 in the final of his rig, a fine super too. After a chin wag we started for home.

In conclusion we wish to thank 2BZ and 2AES for their fine co-operation in making the trip possible, and we hope you Newcastle boys will visit us before winter ends.

We will give you as good a time as you gave us, and to those who supplied cars for our trip we say we appreciated your kindness and thank you.

### BORDER ZONE NOTES. (VK2IG.)

Activity in this section is still at a rather low ebb and conditions are not helping this either.

VK2AEO has now been transferred to Sydney so we hope to be hearing his sigs from there.

VK2AID was in Albury for the car races on King's Birthday and we learn that he is about the only one in Wagga doing much, but reckon his shack a bit cold these nights.

VK2AP still threatening to get going again, but pretty busy on service work.

VK2OJ getting ready to build a lattice for his beam. Gets out nicely to Europe with the present arrang.

VK2EU is rattling the speakers with his new phone rig and pounds in in VK3 we are told.

VK2QD busy building things, but not on the air.

VK2IG been to VIM and met the boys down there at the institute and beat them to a meter in an auction. DX is a bit skinny at present.

### BORDER DX NOTES.

As we have already remarked, DX is not the best at the present, though on 40 there are a few countries coming through, but we have heard no strange ones there.

On 20 an interesting one is P4CC, who is on the S.S.Arendskerk, a Dutch ship running between Holland and Beunos Aires. Was off the Cape Verde Is. when contacted here. Uses the ship's antenna on 14390, is t9 and r8.

MX3C on 14360 is on irregularly around 1100GMT. with a t9 sig. and the QRA is the same as MX2B. FA is well represented in FA3RY, 14385, FA3WW and FA3NY around 14350 during the early afternoon. YV has also been very active with YV5SB and YV5AE on 14410 and YV1AD on 14350 also in the afternoons. HK5EK and HK5BX were heard only, the former being about 14435. A new VP is VP5SB, but not heard much, and old friend VP1JR

is on a lot on 14400 with VP1DM about 14380. PY1DS and PY1AG straggle through at odd times in the evenings. Among the Europeans few rare ones are heard and only HA3Q on 14420 is mentioned. A contest is now on in CT giving you a chance to contact them. The usual CT chaps in CT1JU, CT1ZZ, CT1IT and CT1PC on the H.F. end of 20. U stations still heard and worked early in the day. It appears that for a lot of VK stations CM and XE are real DX yet, and these can be contacted at about 5 p.m. on 20 and around 9 p.m. on 40. There is CM1AF, 14365; CM6DV t6 on 14360, and CM2SW on 14375; XE1CM there also. LY1BX on 14360; VQ3HHP and VQ2AD around the end of the band with CT1IO. WAZ aspirants have a show now as the VE chaps are coming through and Zone 2 is represented by two VE's and a VO, though they haven't been worked here yet. VK2EU reports having worked MX3H and MX4J on 40 metres, together with numerous W's and an odd K7.

## Victorian Division

### NOTICE.

All members of the Victorian Division are asked to keep the evening of 25th July clear. The annual meeting of the division will be held on the night at 8 p.m. in the rooms at 191 Queen street. All members are asked to attend.

### KEY SECTION NOTES. (By 3OC.)

That faith in human nature, and belief in the honour and integrity of his fellow men, which was hitherto part and parcel of your correspondent's outlook on life, has been rudely shattered. In other words he has been practically knocked down and robbed. It all began as a result of the remarks in last month's notes touching on the lack of remuneration forthcoming from the Magazine Committee in exchange for the compilation of this monthly screed. Some days after publication your correspondent was approached by the Editor himself, wearing a friendly

smile (which has since been recognised in its true light—a cunning leer) with the information that as it would appear that the entire success of "Amateur Radio" was dependent on the efforts of your humble scribe, it had been decided to let him in on the ground floor so to speak, and that he was on half the profits of the magazine for the past financial year. Your correspondent expressed his thanks in his usual courtly fashion, feeling that genius had at last been rewarded, and hurrying away went as far as to pay one or two of his more pressing creditors a few shillings on account. Imagine his horror and amazement on discovering that the magazine had actually shown a loss over the period mentioned, and instead of a share in the profits, your correspondent was actually in the red, and in order to square the account it will be necessary to produce at least seven more monthly epistles. Nothing so depressing has happened since your correspondent put 1250 volts on the filament of an Eimac 50T.

However, life is like that, and we newspaper men fight on, as you should know if you attend your local talkie theatre regularly. Although whether the gangsters they bring to book are in the same class as the abovementioned shyster is a moot point.

Hearty thanks are extended this month to WU, whose grid modulation is back in the junk box. SG and UM are still working on exciter units, the former a three stage job with band switching, which will be the forerunner to a general rebuilding programme. UM is also in the throes of a rotary beam, as is YP, who promises it will be a real 28 mc beam. BQ alleges that he has a real 4 element 28 mc rotary beam, while ML says that he will probably build a better one still—imported. Seems to be some competitive spirit about this beam business, must build a far superior one myself and go on fone!

IW has hypnotised the local BCL's into believing that the fone QRM was caused by enemy spies reporting to their respective countries the number of telegraph posts in his street, the task being made easier by the fact that original complaints were to the effect that the speech

was in a foreign language. Result is that IW's key now reposes under the table with the rest of the junk. IG is another of the rotary beam brigade, and has a 14 mc three element beam on a ninety foot mast. Let's hope it works as well as it looks. In this welter of set-ups for a trapeze act it is refreshing to note that KR for one has gone back to fundamentals again, and is using a clothes line as an aerial on 14 mc.

UV has finished his new transmitter and is on the way with a receiver, as is IK, whose 5 metre rig is working, but minus receiver. XJ is not so active these days, wedding bells being so imminent that by the time the printer has finished with this it will be all over. Disappointed with conditions on 7 mc, RN is rebuilding 5 metre rig and hopes to be on very soon. QV is puzzled as to why an aerial six feet short, and with odd length feeders which radiate, still manages to get out. The great thing is not to worry about things like that—only worry if they don't get out.

UC is rebuilding, and hopes fone soon. Your correspondent hopes not. ZU has just completed his hundredth QSO with QK, while XZ, between pounding brass at VJR is working some choice DX. QS reports the works down, and DP has been drowning worms as a change from fishing for the elusive DX. Don't know the story behind the rumour that UH has abandoned crystal grinding in favour of the car towing business, but there it is. Finally RJ, still thirsting for knowledge, wants to know if there are any CW men on 28 mc!

On looking back your correspondent is of the opinion that perhaps he has been a bit hard on the fone men from time to time in these notes. They have borne up bravely, and perhaps the fact that your correspondent has not been on for so long that he has forgotten what little he knew of the code, and if he ever stages a comeback it will of necessity have to be on fone, may influence his decision not to slate the fone men in the future—much!

## U.H.F. SECTION.

(By 3JO)

Section meets third Tuesday each month at the W.I.A. Rooms.

## Further Schedules.

This month we are able to record some further skeds by the Melbourne stations:—VK3RI, mod. osc., 59 mc, Monday evenings 2000 to 2200, recorded programme interrupted every half hour to listen for calls. VK3YL, c.c. 56.0024 mc., Wednesday evenings from 2000 onwards to be spent listening and calling if not working other stations.

## Activity.

During the past month or so we have noticed increased activity on the band and seldom a night passes without someone being heard. 3VL, 3IP, 3IN, 3IK, 3RZ, 3ZD and 3LX are all newcomers and 3NB and 3LG have shown increased activity. 3NB is still the same fine c.c. station, but in a new location, and 3ZD is using his 10 mx final stage as a doubler for 56 mc work, the others using mod. osc. types of rigs, but all are expecting to change to c.c. in the near future. 3DA has altered his rig

## XTALS !!

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(**VKSBBQ**)

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80mx., Low Drift	15/-
40 mx., Thick Cut	20/-
20 mx., Thick Cut	40/-
Prices for Special Types on Application Immediate Delivery.	

# Amateur Radio

to a three stage job with a 10 mx xtal and 35T final, the result being R9 signals in most places. He is also using a converter in front of his s.w. receiver and reports difficulty in copying the mod. osc. rigs owing to frequency modulation. 3ZD also uses a converter. These converters seem to be the answer to the 56 mc receiver problem, but it will be necessary to stabilise our transmitters before they can become really effective.

## Competition.

VK3KP has generously donated a tube of a type suited to ham work as a prize for a competition to be held shortly. As details of this are not yet completed we cannot publish them fully at present, but one of the requirements of the competition will be to originate a message of at least fifteen words stating a good reason why 56 mc should be more popular. As there must be a different reason for each contact, intending competitors should polish up their thinking apparatus in addition to their rigs.

## EASTERN ZONE NOTES.

(3DG-3VG.)

The Eastern Zone Convention which was held in Sale on 10th and 11th June proved a real success and everybody present had a most enjoyable time. It was rather disappointing that members of the executive and more of the city boys were unable to be represented as they missed a swell time. Too much cannot be said for the organising at the Sale end, which was in the capable hands of Stan Johnson, 3XH, who carried things out to the slightest detail. After a prodigious dinner the annual meeting of the zone took place and then an excellent agenda paper was thoroughly debated upon and discussions took the meeting to zero hour. 3WE Bill Williams was again elected to the office of president, and no better secretary could be found than 3PR Ron Jardine, who carried out his duties most satisfactorily during the year. The zone notes and publicity were entrusted to 3DG and 3VG. On the Sunday morning the gang paid a visit to 3TR "B" Class and the Maffra Beet Sugar Factory, not forgetting 3SS, and then made the return trip to Sale via Stratford, calling at 3DG's en route. After lunch the balance of the boys who did not have to leave for home early,

paid a visit to 3GI Gippsland Regional and we hear they had a very interesting time.

## Doings of the Gang:-

3DG.—Had modulator burst into flames at conclusion of last zone hook-up!

3DL.—Jim active when not qrl yl on 40 mx.

3EA.—Evan, we want you in the zone hook up ob so come forth and present yourself at the time and date mentioned under.

3GO.—Graham still building, what a house or a super rig, let's hear of it soon old fellow.

3HK, 3HT, 3PG, 3IG.—Took such a liking to the old man of mountains that they followed him back to his hamlet and enjoyed the real 3WE hospitality as extended when temp. is around the 40 degrees mark. Hear they should have made the trip in summer months when it tastes even better.

3HZ, 3XZ.—Only know they are alive by sounds from 3UL. What are you doing, chaps.

3IC.—Ken, we welcome you to the fold, has only received call and had to be told that limit of power was only 50 watts.

3PR.—Ron with 3HG Neil of Western Zone fame had the job of conveying 3WE safely home in the blue streak and can she streak. Ask 3IG, who was following.

3VG.—Howard decided to show 3WQ and 3JX Stratford by night and after touring for an hour and a half to cover five miles from Maffra, strangely enough found themselves back in Sale. It must have been real good stuff at the dinner the night before to hold good that long.

3SS.—Perhaps Keith can account for the actions of 3VG, WQ, JX seeing they were last seen and heard of from 3SS.

3NO, 3LY.—Will both still be busy accounting for things at "B" Class since a recent visit by a certain lot of fellows.

3IL.—Bob we are all looking out for you ob, so please break the silence.

3JZ.—Another of those silent workers—we want you in our hook-ups, so what say.

3QB.—Sorry to hear Jack you were unable to come up to Sale on 10th.

## Amateur Radio

3IO.—Although now in VIM makes back to Stratford every chance he gets so that speaks a lot for Eastern Zone.

3XH.—Stan a busy man, but with convention over might be able to spend more time on the air. Has a swell antenna up now at new qra so yf can have clothes line to herself now. Anyway it worked Stan.

3WE.—Bill busy taking stock of what the gang left after recent visit. 3HG, 3PR wanted to see snow and after the way they proved themselves as alpine men, Bill is looking for something better than 5,000 feet on empty stomachs to let them loose at.

Zone members please note that on and after Thursday, 6th July, the Eastern Zone weekly hookup will be held every Thursday night at 8 p.m. All active stations are requested to come on and swell the present numbers.

### NORTHERN ZONE NOTES. (VK3BM.)

3YK and 3KR have recently visited the zone, and 3MR is still with us. The wet weather has restricted "Snow's" activities fortu-

nately, as 3ZK, 3JG and 3OR have not been heard since he called on them.

3HX.—Still gets out on 80 mx, but Tom is busy with various public duties, and this damp weather doesn't agree with him.

3ZK.—Is off the air while he builds an fb band-switching super. Jim recovered his 801 from Snow's pocket!

3EC.—Works Yanks on 20 phone o.k., but has muc trouble from harmonics of 3SH alongside.

3QZ.—Proved himself a he-man when he climbed 3BM's 121 footie, putting up steps as he went! Graham has built a motor-generator to boost the D.C. mains voltage, and now has 40 watts input. Worked his first Yank on 40 recently.

3TL.—Treb. has an elusive bug in his Rx.

3OR.—Is discussing 20 mx beams. The junior op. is becoming interested in the mike.

Recently there has been a great improvement in 3CH's strength and quality.

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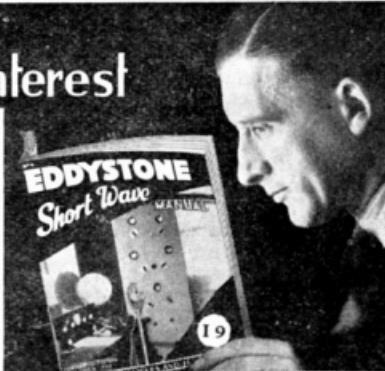
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3JG.—Johnny is busy packing a good crop of citrus. Why not join in the Sunday a.m. hookups, om?

3EP.—Is not on the air from his new QTH yet, but has taken up xtal grinding again.

3DU.—Doug. is willing to cooperate in 5mx tests from Mt. Tarangower.

3CE.—Roy has rebuilt the modulator with good results, and is now contemplating a new super-het.

3WN.—Greatly improved his phone by using a 2A3 as modulator, but finds that it is hard on the "A" battery.

3FF.—Jock is interested in V beams. With all that space, why not, om?

3KY.—Puts out the maximum of signal with the minimum of rig. May be changing his QTH soon.

3EF.—Has invaded the 80 mx band. Tough on the local BCL's.

3BM.—Busy clearing out the wreckage, but to give Snow his dues, the sigs do get out better on 20 since he altered the feeders. Twelve new countries to prove it. Many antenna experiments under way here.

The Northern Zone has a phone hook up on 80 mx every Sunday at 9.30 a.m., 3TL on 3509 k.c. being key station. All members are invited to join in.

## WESTERN ZONE.

(VK3HG.)

3DA.—New ham in Hamilton and very keen. On staff of local "B" Class station.

3SZ.—Quite active on 7 mc and pleased with results of new dynamic mike. Gets on 3.5 mc for weekly hookup.

3FA.—Not heard very much, but believe he visits Hamilton for certain reasons.

3XG.—Hopes to be on 3.5 mc for weekly sked soon.

3WT.—Still keeping Geelong on the map.

3II.—On 3.5 and 7 mc as usual and after seeing the V beams at 3HG is thinking of something in the same line.

3OW.—Has the super going quite well and is on occasionally when not flying.

3TW.—Active on CW!

3CK.—Heard on both 3.5 and 7 mc when time permits.

3HG.—Attended Eastern Zone convention and afterwards visited

north eastern stattiins in company with 3PR.

## Queensland Division

(By 4ZU.)

The June meeting was fairly well attended, a couple of old faces being noticed, namely 4AP and 4WT. Mr. M. Gabriel delivered a very interesting lecture on "The Electron Theory," which was well received by most of those present, although a couple of hams wilted under the strain. A visit to the "Courier Mail" and its associate broadcasting station is contemplated for the latter part of this month.

On Sunday, 16th June, a Direction Finding Field Day was held by the Queensland Division. About two dozen hams took part and a good time was had by all present. Some of those participating were VK4's AW, WL, UR, UU, JP, AP, CX, PX, RY, JB, RT, JF, FJ, ES, ZU, RC, GU and others. The day proved highly successful as far as results went, all parties succeeding in tracking down the hidden station at Everton Park, Enoggra, which was operated by 4RY and 4JB.

4VJ.—Heard working a few Yanks, etc. How's the rotary going, Vince?

4PX.—Arthur tells me he is tiring of fone, so it looks as if the good old key will be pounded again shortly.

4GU.—Inactive, but has a QRP rig just in case the bug bites.

4FJ.—Picking up stray Europeans on 20 mx. Save a few for me please Roy.

4HR.—Our 5 mx champion not heard very much lately. What's going on Tibby?

4JF.—Finds it easy to work Europeans, but the Yanks are more elusive.

4RT.—Busy with work, etc., but the grass will stop growing a little soon John.

4JB.—Has staged a comeback. How about some of you other old timers following Oscar's example?

4OK.—Working DX consistently with about 4 watts. Nice work!

4AW.—Arthur lying low, but just waiting for those contests to come round.

4CW from Warwick heard on again.

4RG also on 40 mx chewing the rag with the boys.

4CN, the man from Cribb Island, heard on quite a bit. Here's a new country for you Century Club hounds. Give Jim a call.

4JP.—George has promised to donate a tube to the ham dragging in the most new members. Nice work om.

## BUNDABERG ZONE.

4JJ.—Jim very QRL servicing sets and no time to get the 43's heated up.

4OJ.—Verdi has a new super and it is fb indeed. Brings in all stations on the air and a few which shouldn't be on the air.

4HP.—"Herbie High Power" still doing a bit on 40 mx and helping 4JJ get the bugs out of B.C. sets.

4XR.—Eric is going to chop 4XO's antenna down because of what he put in May issue of A.R. Oh Yeah! 4XR has a great antenna; was meant to be full wave on 20 mx but when he reached 50 odd feet he couldn't find any more pieces of wire to join on. Reckons the clothes line will suffer for the extra feet.

4XO wants to swap anyone a 30 valve for a bucket of AC current. Is fed up with DC—any offers? Just got QSL from Russia and 4XR heard him whoopee at the other end of the town.

Say, all you country men! 4FJ, our zone manager, is trying to hear from some of you, so don't be backward in giving Roy a call—it's up to you!

## South Australian Division

(VK5JT.)

Well chaps, until the council appoints an assistant secretary to handle publicity matters, yours truly will endeavour to fill up the allotted space here.

In order to bring the S.A. Division of the W.I.A. into line with the other States it was decided to incorporate. A copy of our rules had to be lodged with the application, so it was a good opportunity to give them the "once over." This has now been done and copies will be issued to members in due course.

The new constitution provides for the following officers:—President, vice-president, secretary, assistant

secretary, treasurer, and membership organiser; these officers also act as the council.

The first general meeting under the new rules was held on 24th May, when there was a good attendance. The following officers for the ensuing year were elected:—President, J. Kilgariff, VK5JT; vice-president, H. N. Bowman, VK5FM; secretary, R. D. Elliott, VK5RD; treasurer, E. P. McGrath, VK5MO; membership organiser, J. McAllister.

Council meetings will be held on the first Wednesday and general meeting on the third Wednesday of each month. It is intended to make the general meetings more interesting for members by deleting all routine business matters, making lectures shorter, etc. Subs have been fixed at £1 for city and 10/6 for country members. This includes "Amateur Radio" free for the year.

Some of the country members were asking what we do with our cash. Well practically all of it goes for rent and Federal per capita payments. It is essential that members have a room for their headquarters, hence they must pay for the privilege. This applies equally to country as well as city members.

It must be stressed that at present the commercial interests are endeavouring to take more of our ham bands. The only way to resist them is by being organised. The radio authorities will take no notice of any protests from single hams, but they will take note of any organisation that puts in objections. Therefore, I urge upon all hams the necessity of joining the W.I.A. The more members, the more cash we have and the better we can fight, so send in your entrance form, fee and subs right away.

The P.M.G.'s Department has informed us that they are prepared to use hams and their stations in the event of a telegraph line breakdown. We are now organising an emergency network so country members willing to assist in emergencies send me full particulars of your gear. The most essential thing is to have an emergency power supply in case the mains fail. The next is to be able to send and receive messages quickly and accurately. The department has stated that all traffic handled must be in C.W. I am acting as emergency

# Amateur Radio

control officer in the city at present and skeds for traffic handling practice are held at 10 a.m. Sundays. Write out a few messages, call me, and obtain the necessary practice. Use procedure as per A.R.R.L. Handbook.

## R.A.A.F. RESERVE WIRELESS SECTION.

The O/C informs me that the present hold-up is due to old members not returning their equipment to the Air Board. New gear will not be issued until this has been put in. A waiting list will be kept of hams wishing to join the Reserve, so send me your name and when a vacancy occurs you will be notified.

The following hams are active at present:—Fone: VK5DW, BF, BU, CR, DI, GF, GM, JU, LB, LC, PN, RE, GS, RK, TR, XA, RJ, LK, C.W.: VK5YL, AK, AF, FM, GK, HN, JT, KJ, KL, LD, LL, LP, LW, MK, ML, QM, RL, TL, TX, WK, ZU, RN, BL, JM, AJ, LT, ZZ, KM, BC, LD.

73, JOE.

## Western Australian Division

Meeting night: Second Tuesday in the month at 8 p.m. at headquarters.

As predicted by your humble servant, the annual general meeting held at the conclusion of the ordinary monthly meeting (13th June) proved long, argumentative and (in patches) heated.

The ordinary meeting lasted about routine business only brought to light two matters, 6NL's announcement that the 6WI modulator should be finished and in working order within a fortnight, and the report of the 40 metre Home QSO day, won by 6AF (35 points), with 6WZ (33) and 6KW (31) the runners-up. 6FL made highest country score with 27 contacts—very fine work.

At 8.2 p.m. the annual meeting was opened and the president (6MW) gave his address on the year's activities, stressing the improved position not only in W.I.A. affairs, but in amateur and experimental activity generally. The membership of the Division was at its strongest with a total of 200, of

which 70 were full members, the remainder enrolled as students. The activity on the bands was keener, students' progress was encouraging and the division's finances were in a better condition than at the last annual general meeting. 6MW then went on to mention the help he had received in his term of office from the various officers of the Division, with special reference to the hard work and enthusiasm of the secretary treasurer, 6KS.

There followed the financial report, balance sheet, auditor's report (including a reference to the high rental paid in proportion to the division's income), QSL officer's statement, and finally the report from the scrutineers on the council ballot. 1939-40 councillors are 6KS, 6CB, 6WH, 6GM, 6BB, 6LW, 6CX, 6MW, and 6BW. Students rep. on council, 6BB; C.M.I.C. officer, 6CC; QSL, 6CP; monthly letter, 6WH; technical director, 6GM; station manager, 6NL; traffic, 6AF; librarian, 6EI; auditors, 6IG and Mr. Nind; publicity, 6WZ.

After T.D.S. and Field Day committees had been elected 6FR formally moved that the subscription be increased to one guinea for full members (metropolitan) and 15/- (country) with 6CX as seconder. The discussion was loud, long, involved, often dry, sometimes misleading and at all times (to a few who made their feelings all too obvious) boring. When the vote was put the motion was defeated by 18 votes to 12. After some further questions and answers regarding traffic, a "missing" practice key and that long-promised a.c.-operated code oscillator, the meeting was declared closed at 10.55. Members departed amidst cries of "See you at the dinner!"

### Undamped waves:—

6AF noted receiving many offers of escort home after receiving his 809 trophy!

6FL is very pleased with his new antenna. Also tickled with the 80 ohm feeder. Works all sorts of DX and is now active on 28 mc.

6MN heard on 7 mc and seen about the city with a toothless (but still cheery) grin. Spends spare time listening to technical lecturets (per 7 mc fone) and is greatly perturbed about his buffer stage, hi!

## Amateur Radio

6MW still leading a busy life of business and radio.

6BW travelling for his firm. Say, Mick, about these commercial traveler yarns . . . ?

6LW sat for the broadcast ticket recently. Good luck Wally!

6CC unjustly accused in these notes last month of being mover of motion re sub. Apologies, Bob—and to Fred (6FR) the mover. Both heard on 7 mc fone at odd intervals.

6WS heard on 7 mc recently. Has presented a framed "composite" of his station to the Institute—very nice, too.

6BE gets on 7 mc C.W. now and then with fb sig and fist. His fellow conspirators, 6AJ and 6YB not heard these days. The former is busy with flying course; the latter—stout fella—has given me a regular order for "A.R."! Next, please.

6GA has solved the problem of good speech quality at low cost. Now uses dynamic speaker (permag-type) and single-button mike with blended outputs. No fooling, the idea really works! Cheaper than xtal mikes, too.

6CP once more our QSL man and that in itself is a guarantee. Should be busy now that he has added five mx to his worries. Clarrie is a specialist in radio-active wire netting and horizontally-polarised chickens, by the way!

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### Tasmanian Division

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#### NORTHERN ZONE.

(By VK7LZ.)

Owing to the fact that all the members of this zone were busy this month at the Launceston Radio and Electrical Exhibition, our activities were practically nil, and I therefore have nothing to write about. However, if the editors will grant us space, we hope to send in an account of our activities at the Exhibition, together with a photo of the stand; if possible by next month's issue.

A special meeting of this Zone was held in Launceston on 15th June to discuss the proposed amendments to the Constitution of the Tasmanian Division of the W.I.A., and after a lengthy discussion we decided on several amendments, which we hope will be of value both to this Zone and the Division in general.

All the stations which were off the air owing to having gear on display at the Exhibition are now getting back on the air again, so I hope to give you more news next month. However, conditions here are terrible at present, with next to nothing in the way of DX coming through, so if any mainland stations are after VK7's they will find us all on 40 metres of an evening, where 7GJ, 7KR, 7XL, 7LZ and 7DS may be heard most evenings, the first four mostly on phone.

VK7JB is now back in Tasmania this time here in the north, so we have another active amateur to add to the ranks. Before long we will give the mainlanders a run for their money in DX contests, etc., so look out, fellows. We'll be trying.

Well more news next month, and don't forget our meeting for July at the Y.M.C.A. on the last Thursday of the month at 8 p.m.

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(Continued from page 11.)

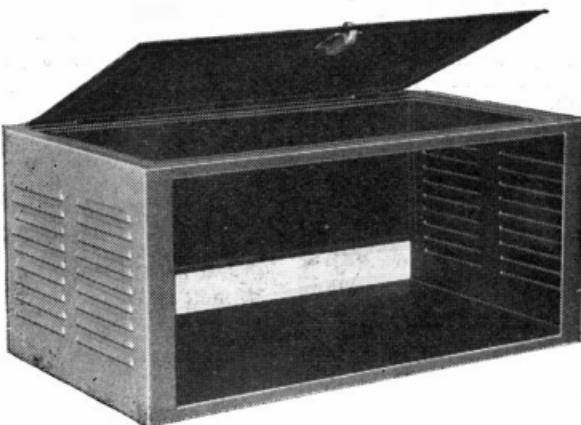
ends. George, VK4JP has now worked 32 zones, 80 countries on fone and 87 on fone and cw. His best this month is SV1CA on fone. The SV being on 14280 kc. He also reports PK6CI on cw. Let's have some more dope, gang. Happy hunting. 73. Snow.

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(Continued from Page 14.)

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ing signals will be appearing all over the place.

It would be retrogressive and unwise even to suggest that these devices should be banned on this account. But it is essential that they be controlled, and controlled rigidly, otherwise every Tom, Dick and Harry who feels so disposed will be making transmitters at home, and we may even see some of the more enterprising of these gentlemen entering the piracy business.

Naturally, the possibility of occurrences such as those prophesied above has arisen in America; we find in a recent edition of QST that legislation has been introduced there prohibiting the use of these control devices for any form of communication. It is not stated, however, whether any provisions as to authorised frequencies were laid down, nor was the question of interference mentioned.

I therefore suggest that the following measures should be taken here to safeguard the interests both of the Amateurs and the public:—

(a) Restriction of the right to make and sell these devices to those who can show proof of their ability to do so properly..

(b) Restriction of the control transmitters to certain suitable frequency channels.

(c) Application to these units of regulations similar to those dealing with interference by Amateurs, i.e., that the owners of sets producing interference shall cause the interference to be removed from whatever service it happens to be affecting; failing that, that the use of the particular set causing the trouble shall be prohibited until such time as it shall cease to interfere.



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